

In the Claims:

Please amend the claims as follows:

1. (currently amended) ~~Sensor (10)~~ A sensor, comprising at least a first area (11) and a second area (12) of pixel elements arranged to absorb electromagnetic radiation from an object (2), the characteristics of which are to be imaged, and to convert the radiation absorbed into electrical charges, in which the first area (11) has a first degree of resolution and the second area (12) has a second degree of resolution different from the first degree of resolution, ~~characterised in that~~ wherein the first area (11) is arranged to image one type of characteristics and the second area (12) is arranged to image another type of characteristics.

2. (currently amended) ~~Sensor~~ The sensor according to ~~Claim 1~~, ~~characterised in that~~ claim 1, wherein the first area (11) is arranged to image three-dimensional characteristics of the object (2) and that the second area (12) is arranged to image two-dimensional characteristics of the object (2).

3. (currently amended) ~~Sensor~~ The sensor according to ~~Claim 1~~, ~~characterised in that~~ claim 1, wherein at least one of the two areas (11, 12) is provided in its entirety or partially with ~~colour~~ color filters in order to image the object (2) in ~~colour~~ color.

4. (currently amended) ~~Sensor~~ The sensor according to claim 1, wherein ~~any one of~~ any one of ~~Claims 1 to 3, characterised in that~~ the first area (11) is designed as a matrix having N rows and

M columns, that the second area (12) is designed as a matrix having X rows and Y columns and that Y is b multiplied by M columns, where b is an integer greater than zero.

5. (currently amended) ~~Sensor~~ The sensor according to ~~Claim 4~~, characterised in that claim 4, wherein time delay integration (TDI) is used on the second area (12).

6. (currently amended) ~~Sensor~~ The sensor according to ~~Claim 1~~, characterised in that claim 1, wherein at least one of the areas (11, 12) is provided with filters for different wavelengths in order to ~~minimise~~ minimize crosstalk.

7. (currently amended) ~~Sensor~~ The sensor according to ~~Claim 1~~, characterised in that claim 1, wherein the first area and the second area are arranged parallel in a transverse direction as one integral unit.

8. (currently amended) ~~Sensor~~ The sensor according to ~~Claim 1~~, characterised in that claim 1, wherein the first area and the second area are arranged parallel in a transverse direction as two separate units.

9. (currently amended) ~~System~~ A system for measuring character-dependent parameters of an object (2) comprising at least one light source (3, 4), which emits light towards the object, wherein (2) ~~characterised in that~~ the system further comprises a sensor (10) according to ~~any one of Claims 1 to 8~~ claim 1, arranged to absorb electro- magnetic radiation from the object (2) and to convert it into electrical charges.

10. (currently amended) ~~System~~ The system according to claim 9, wherein Claim 9,
~~characterised in that~~ the system also comprises an output register (15) arranged to read out the
charges received in the sensor (10).

11. (currently amended) ~~System~~ The system according to claim 9, wherein Claim 9,
~~characterised in that~~ the system also comprises at least two output registers (18a, 18b) arranged
to read out the charges received in the sensor (10).

12. (currently amended) ~~System~~ The sensor according to claim 11, wherein Claim 11,
~~characterised in that~~ the first area (11) and the second area (12) of the sensor (10) are each read
out on their own output register (18a, 18b).

13. (currently amended) ~~System~~ The sensor according to claim 11, wherein Claim 11,
~~characterised in that~~ if the second area (12) of the sensor is provided with ~~colour~~ color filters,
each ~~colour~~ color picked up has its own output register.

14. (currently amended) ~~System~~ The system according to claim 10, wherein Claim 10 or
11, characterised in that the system further comprises an A/D converter (16) arranged to convert
the electrical charges from an analog to a digital format and that the output register (15, 18a,
18b) is a digital output register.

15. (currently amended) ~~System~~ The system according to claim 9, wherein Claim 9,

~~characterised in that~~ the system also comprises an image/signal processing unit arranged to analyse alanyze the electrical charges.